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| 10/698,173 | 10/30/2003 | Howard Shelton Lambert | GB920020092US1 | 2503 |

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| EXAMINER |
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MASKULINSKI, MICHAEL C

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| ART UNIT | PAPER NUMBER |
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2113

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/26/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/698,173 | LAMBERT ET AL. | |
| | Examiner | Art Unit | |
| | Michael C. Maskulinski | 2113 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12-16, 18-21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Final Office Action

Claim Rejections - 35 USC § 101

1. In view of the recent amendments, the rejection of claim 23, under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, has been withdrawn.

Claim Rejections - 35 USC § 112

2. In view of the recent amendments, the rejection of claims 11 and 22, under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn.

Claim Objections

3. In view of the recent amendments, the objections to claims 7, 8, and 19 have been withdrawn

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 5, 7-10, 12-14, 16, 18-21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Havekost et al., US 2002/0108077 A1.

Referring to claims 1, 12, and 23:

a. In paragraph 0047, Havekost et al. disclose that modules may include respective logic that monitors the operational status of equipment controlled by each module, the values of process variables compared to a predetermined

operating range (e.g., a setpoint or control range), or any other failure information desired (wherein the one parameter comprises at least three values corresponding to a minimum value and a maximum value together representing a range and a variable value).

b. A data structure holding data associated with the at least one parameter would be inherent to the system of Havekost et al. since the variable and operating ranges have to be stored in the control logic.

c. In paragraph 0047, Havekost et al. disclose that each phase may, on a step by step basis, process failure information associated with the module or modules that carry out that step to determine if the step can proceed. And in paragraph 0056, Havekost et al. disclose that the batch executive function could alternatively perform some or all of the failure management activities.

Alternatively or additionally, some or all of the failure management activities could be performed by one or more software routines running within the server (a second component separate from the data structure comprising, collectively, a means for accessing data of the data structure, means for monitoring the variable value, and means, responsive to the variable value lying within the range, for managing the at least one parameter).

d. In paragraph 0003, Havekost et al. disclose a second component for selectively updating data in the data structure.

e. With respect to claim 24, in paragraph 0058, Havekost et al. disclose implementing the invention in software.

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Referring to claims 2 and 13, in paragraph 0047, Havekost et al. disclose monitoring the operational status of equipment (wherein the at least one parameter represents a resource associated with the system).

Referring to claims 3 and 14, in paragraph 0048, Havekost et al. disclose that failure information includes that a control parameter has fallen outside of a predetermined range of values (responsive to the variable value lying outside the range, for invoking an action).

Referring to claims 5 and 16, in paragraph 0048, Havekost et al. disclose that the list of failure information may include process control variables. Since process control variables change in the system, it would be inherent. A system as claimed in claim 1, further comprising means for updating the data structure with the data, when the first component is launched.

Referring to claims 7 and 18, in paragraph 0048, Havekost et al. disclose that each of the control modules can automatically pass information such as requested failure information to the unit phases (means for notifying the second component of events associated with the first component).

Referring to claims 8 and 19, in paragraph 0040, Havekost et al. disclose implementing the invention in software. In order for variables and parameters to be executed by software they have to be instantiated and initialized to some value. Therefore, means for initializing the parameter, wherein upon initialization, the variable value represents an initial value is inherent to the system of Havekost et al.

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Referring to claims 9 and 20, in paragraph 0043, Havekost et al. disclose performing a process only when control parameters are within a desired range therefore, when the first component is launched, the variable value represents a current value.

Referring to claims 10 and 21, in paragraph 0043, Havekost et al. disclose that failure of control parameters to fall within an acceptable range may result in damage to the equipment or product making it a critical component.

6. Claims 1-5, 8-10, 12-15, 19-20, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sauvage et al., US 2003/0056156 A1.

Referring to claims 1, 12, and 24:

- a. In paragraph 0009, Sauvage et al. disclose procuring a range of expected values of a time-dependent variable of the system, the range having upper and lower limits relating to expected operating parameters of the system (wherein the at least one parameter comprises at least three values corresponding to a minimum value and a maximum value together representing a range). In paragraph 0010, Sauvage et al. disclose procuring an actual value of the system's time dependent variable (and a variable value)
- b. In paragraph 0011, Sauvage et al. disclose comparing the actual value with the expected range (a second component separate from the data structure comprising, collectively, a means for accessing data of the data structure, means for monitoring the variable value).

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c. In paragraph 0021, Sauvage et al. disclose that an advisory signal is generated in the event that the actual value falls outside the expected range, whereby appropriate remedial action is taken (and means, responsive to the variable value lying within the range, managing the at least one parameter).

Further, in paragraph 0023, Sauvage et al. disclose that expected values preferably are alterable (selectively updating data in the data structure)

Referring to claims 2 and 13, in paragraph 0054, Sauvage et al. disclose monitoring a processor or memory (wherein the at least one parameter represents a resource associated with the system).

Referring to claims 3 and 14, in paragraph 0021, Sauvage et al. disclose that an advisory signal is generated in the event that the actual value falls outside the expected range, whereby appropriate remedial action is taken (the step of invoking, in response to the variable value lying outside the range, an action).

Referring to claims 4 and 15, in paragraph 0039, Sauvage et al. disclose that the remedial action may involve at least one of a system restart, a system switchover and an expected range override (wherein the action comprises a re-launch of the first component).

Referring to claims 5 and 16, in paragraph 0020, Sauvage et al. disclose monitoring the current activity of the system, therefore, the data is updated initially and at every stage of the system (the step of updating the data structure with the data, when the first component is launched).

Referring to claims 8 and 19, in paragraph 0020, Sauvage et al. disclose monitoring the current activity of the system, therefore, the data is updated initially and at every stage of the system (the step of initialising the parameter, wherein upon initialisation, the variable value represents an initial value).

Referring to claims 9 and 20, in paragraph 0020, Sauvage et al. disclose monitoring the current activity of the system (when the first component is launched, the variable value represents a current value).

Response to Arguments

7. Applicant's arguments filed December 27, 2006 have been fully considered but they are not persuasive:

8. On pages 10-11, under section VIII, the Applicant argues, "It is readily apparent that Havekost fails to show a data structure, as taught by Claim 1, that interacts with a separate component capable of performing all the respective functions recited by Claim 1 for the second component. In the Office Action, it was stated that the data structure 'would be inherent'. However, the clear and fair teaching of Havekost, as taught by the sections thereof set forth above, is an arrangement wherein failure information originates with field devices 50-60 or the like, is routed to control modules such as 308-312, and the control modules send information, in the form of composite failure codes, to a unit module or unit phase such as unit module 306. The unit module then makes decisions based on the failure codes. This arrangement is not considered to in any way disclose the data structure recited by Claim 1, wherein the second component thereof accesses data of the structure, and selectively updates the data of the data structure."

The Examiner respectfully disagrees. The Applicant points to specific areas in the reference that are not relevant to the Examiner's rejection and chooses to ignore the above rejection and specifically the teaching in paragraph 0047 of Havekost. In paragraph 0047, Havekost et al. disclose that modules may include respective logic that monitors the operational status of equipment controlled by each module, the values of process variables compared to a predetermined operating range (e.g., a setpoint or control range), or any other failure information desired (wherein the one parameter comprises at least three values corresponding to a minimum value and a maximum value together representing a range and a variable value). As stated earlier, a data structure holding data associated with the at least one parameter would be inherent to the system of Havekost et al. since the variable and operating ranges that are needed for determining a failure have to be stored in the control logic. In paragraph 0003, Havekost et al. disclose a second component for selectively updating data in the data structure.

9. On page 11, under section VIII, the Applicant argues, "Havekost likewise fails to show the second component as now recited by Claim 1. The Office Action indicated that the logic included in modules, presumably meaning logic 314-318 of control modules 300-304, could perform a monitoring function by monitoring operational status of equipment and various failure information. However, Havekost emphasizes, such as paragraphs [0047] and [0048] as discussed above, that it is a unit module, such as unit phase 306, that determines what action to take after receiving failure information from a control module. Thus, the clear teaching of Havekost is that the unit module, and not

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the control module, perform the management function. In contrast, Claim 1 teaches that monitoring and management functions are to be combined in a single (emphasis by Applicant) second component." The Examiner respectfully disagrees. A second component can be a combination of the unit module and control module since in paragraph 0047, Havekost discloses that they are fully integrated. As an example, the Examiner would like to point out that a memory could be considered a component, yet it consists of many wires and gates, which are also components. The Examiner encourages the Applicant to better define exactly what a second component is, what it does, how it operates, etc., rather than using vague, broad terms.

10. On page 11, under section IX, the Applicant argues, "Claim 1 as now amended is considered to distinguish over Sauvage, particularly in reciting the second component thereof in the overall combination of Claim 1. As stated above, Claim 1 has been amended to incorporate the subject matter of original Claim 6, now canceled. In the Office Action, the Examiner did not cite Sauvage against Claim 6. Accordingly, Claim 1 as amended clearly distinguishes over Sauvage." The Examiner respectfully disagrees. In paragraph 0011, Sauvage et al. disclose comparing the actual value with the expected range (a second component separate from the data structure comprising, collectively, a means for accessing data of the data structure, means for monitoring the variable value). In paragraph 0021, Sauvage et al. disclose that an advisory signal is generated in the event that the actual value falls outside the expected range, whereby appropriate remedial action is taken (and means, responsive to the variable value lying within the range, managing the at least one parameter). Further, in paragraph 0023,

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Sauvage et al. disclose that expected values preferably are alterable (selectively updating data in the data structure).

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, reading "Michael Maskulinski". The signature is fluid and cursive, with the first name "Michael" and last name "Maskulinski" clearly distinguishable.

Michael C Maskulinski
Examiner
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